

Los Alamos National Laboratory

# MBA Summer Internships

## *10th Anniversary*



10 Years of Investment

*Innovation*

*Experiential Learning*

*Entrepreneurship*

*Mentoring*

*Challenging Projects*

One Unique Experience

*Market Knowledge*

*New Companies*

*Collaborative Research Partnerships*

*Business Networks*

*Personal Friendships*

A Lifetime of Returns

## Technology Transfer Division

# Can you identify the next “hot” technology destined to hit the marketplace?

## MBA Summer Internships

Put your business training and your intellectual creativity to work at Los Alamos National Laboratory as a summer intern in the Technology Transfer Division identifying, evaluating, and assisting in the commercialization of breakthrough innovations.

## About the Laboratory

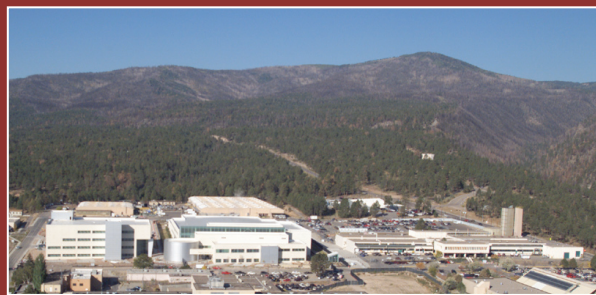
For more than half a century the name Los Alamos has been synonymous with research at the frontiers of science and service to the nation. Since its origin as a secret, makeshift laboratory on a remote mesa top in New Mexico, Los Alamos has attracted world-renowned scientists—several of whom have gone on to win prestigious Nobel Prizes—and engaged their energies and creativity to advance knowledge and find solutions to the nation's most challenging problems. That tradition is alive today. As one of the U.S. Department of Energy's multi-program, multidisciplinary, research laboratories, Los Alamos thrives by having the best people doing the best science to solve important problems for the nation.

## About the Technology Transfer Division

The Technology Transfer (TT) Division enhances the Laboratory's mission by partnering with industry, by accelerating the creation of products from Los Alamos discoveries, and by fostering a regional entrepreneurial economy. As the primary bridge between the nation's leading science laboratory and the commercial world, our responsibilities are more varied than any other comparable technology commercialization organization in a federal laboratory. For instance, to meet the many challenges associated with building a business in northern New Mexico, specifically a business based on Los Alamos technology or expertise, TT manages a variety of entrepreneurial and business development activities. TT Division's MBA Internship Program has been a flagship project in our efforts to support high-tech business development as well as in our licensing and partnering activities.

## MBA Internships

The Laboratory's MBA summer internship matches experienced scientists and engineers with the nation's future business leaders to achieve effective commercialization and entrepreneurial outcomes for Los Alamos technologies. MBA candidates have a unique opportunity to gain hands-on experience in high-tech entrepreneurship and commercialization by working closely with



*Overview of the main Los Alamos National Laboratory technical and administrative site on the Pajarito Plateau looking west toward New Mexico's Jemez Mountains.*

*The Tech Transfer Division coordinates Laboratory participation in R&D Magazine's annual R&D 100 competition, which selects the year's 100 most innovative technologies from worldwide submissions.*

Laboratory innovators and regional entrepreneurs to nurture licensing opportunities, partnerships with industry, and startup businesses based on Laboratory technology and expertise. MBA interns explore ongoing research and hone their business skills by

- evaluating and prioritizing market applications and the commercialization potential of Laboratory technologies;
- working with regional entrepreneurs to address a variety of start-up business challenges;
- identifying potential collaborators, investors, and buyers;
- creating financials and business valuations; and
- writing and critiquing commercialization and business plans.

During the past nine years, MBA interns have worked with 80 new regional startups that have provided employment for over 280 people and attracted \$79 million in external investments.

## Eligibility

A bachelor's degree in science or engineering is preferred for applicants. All applicants must be enrolled in an MBA program and must have completed at least one year in the program. Previous business experience is desirable. Applicants must be U.S. citizens or permanent residents. Program duration is approximately 10–12 weeks during the summer months.

## Application

Please submit a letter of interest and current résumé to:

Belinda Padilla  
Technology Transfer Division  
Los Alamos National Laboratory  
P.O. Box 1663, MS C333  
Los Alamos, NM 87545

## Questions

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Visit us on the Web: [www.lanl.gov/partnerships](http://www.lanl.gov/partnerships)



*My main internship goal was to have a truly unique experience, something that would be difficult to accomplish at other points in my career and life. When I learned about the opportunity to work at Los Alamos helping to bring bleeding edge technology to*

*market, I was instantly intrigued. I can honestly say that among all my friends at UCLA, I had the most unique experience. I worked on a hydrogen fuel cell technology project for the duration of the internship. The resulting report was used by the New Mexico State Legislature as a key data point in its decision to use state funds to promote hydrogen fuel cell technology entrepreneurship. This line item on my résumé is never overlooked by recruiters and hiring managers as something that makes my experience stand out.*

*In addition to the career development, Belinda assembled a great group of interns from top business schools all over the country. I continue to stay in contact with most of my fellow interns on both a professional and personal level. All around, I couldn't imagine having a more rewarding experience.*

— James Beser, MBA  
UCLA 2005

## LANL MBA Intern Impacts State Legislation

Hydrogen and fuel-cell technologies are poised to provide major improvements in energy efficiency, greenhouse gas emissions, pollution abatement, and quality of life. Governments in the United States, Canada, the European Union, and Japan are currently committing several billion dollars over the next five years to the development of these technologies and their widespread commercialization.

In 2003, New Mexico Governor Bill Richardson established hydrogen and fuel cell economic development as a key initiative, building on over 25 years of extensive research and development resources throughout the state.

In conjunction with HyTeP, a hydrogen technology alliance representing industry, business, research laboratories, universities, and government and the New Mexico Economic Development Department, Los Alamos MBA Intern James Beser authored an opportunity assessment to help determine the feasibility of positioning New Mexico as a world leader in hydrogen and fuel cell research and to enable the growth of a related fuel cell industry cluster.



The three-month, intensive, research project led by Beser (from the University of California, Los Angeles) culminated in a set of recommendations for leveraging New Mexico strengths and overcoming identified challenges. Based on primary and secondary research, the report

- described the current state of the hydrogen economy;
- used Michael Porter's "Cluster Theory Framework" to assess New Mexico's current strengths and weaknesses;
- presented a competitive analysis of other state hydrogen incentive programs and initiatives; and
- provided recommendations for a path forward.

The report was the basis for an in-depth, comprehensive, strategic plan. Based in part on recommendations from the report, the New Mexico State Legislature passed the Advanced Energy Technology Development Act, which provided \$200,000 in funding to HyTeP to assist with marketing and promotion of the state's hydrogen assets to attract businesses engaged in hydrogen research.



*“We can do in eight minutes what others can do in a day,” says Warner. Caldera is hoping to increase the \$7 million to \$10 million in the near future and to set up shop in Los Alamos, N.M., with plans to employ 30 to 60 people.*



**LANL Business Development Executive Brad Morie (right, a 2002 MBA intern) visits LANL inventor Ben Warner in his lab. Morie helped Warner write a business plan for his micro x-ray fluorescence technology used in the development of novel pharmaceuticals.**

### **Successful MBA Collaboration**

Among Los Alamos National Laboratory researchers, few are as inventive as Dr. Benjamin Warner who has 22 patents and patent applications to his name. No small achievement, all 22 have been licensed commercially. Warner's patents span a variety of markets and include a self-dimming automobile mirror and a beryllium detector.

Warner has worked with MBA interns on several projects over the years as both a client and a mentor. After several successful commercialization efforts, he recently left the Laboratory to launch a spinoff company based on his most exciting invention to date, a microwave x-ray fluorescence technology, MESA (measuring enzyme-substrate affinities), that can measure multiple drug/protein interactions simultaneously.

Warner, currently on Entrepreneurial Leave of Absence from the Laboratory, has landed \$7 million in equity and debt financing and launched his company, Caldera Pharmaceuticals, which has an answer to a costly drug development problem. Caldera has licensed Los Alamos' MESA technology, originally developed by Warner during his tenure with the Laboratory. The MESA technology addresses the core of how many pharmaceuticals work: through the binding of chemicals and proteins. Caldera's method allows researchers to test a single chemical against thousands of proteins at once instead of testing a few chemicals against a single protein at a time.

**Below: Jeff Stewart, (left, 2003 MBA intern) with Ben Warner**



*With Ben Warner, I found a scientist and inventor who had great technical ideas that move naturally into great commercial ideas. It's a wonderful learning experience to get a technology and try to envision the business plan from that technology. This can be extremely difficult for many early stage technologies. I was so impressed by Ben that I angled for the next three years to work with him on his next startup, and now I am VP of Business Development for Caldera Pharmaceuticals. The MBA internship program is a great career move for entrepreneurial spirits.*

**— Jeff Stewart,  
VP Business Development,  
Caldera Pharmaceuticals**

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